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(54) Title: METHOD OF FILLING HIGH ASPECT RATIO, SMALL DIMENSION GAPS AND FORMULATIONS USEFUL THEREIN

(57) Abstract: The invention is a method comprising (a) providing a substrate having at least one recessed feature characterized by a width of less than about 0.3 microns and an aspect ratio of 5 or higher, (b) coating onto the substrate a composition comprising (i) a curable polymeric material, (ii) a thermally deactivatable gap-filling aid, and (iii) at least one solvent, (c) drying the coated substrate to remove the solvent, leaving a composition of cross-linkable polymeric material and gap-filling aid substantially filling the recessed feature, and (d) heating the coated substrate to cure the polymeric material and to de-activate the gap-filling aid, wherein the cured material has a glass transition temperature of no less than 300°C and, preferably, a thermal stability temperature of at least 300°C.